Rationale Sheet

for

NPDES General Permit for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)

Permit No. TNS000000

November 25, 2002

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I. Purpose and background

A. Purpose of this rationale sheet

This rationale sheet is intended to explain the basis for conditions of a proposed NPDES general permit to cover discharges of storm water runoff from Phase II MS4s, including city and county-operated MS4s and those operated by regulated military bases.

B. Phase I and Phase II EPA storm water rules

Over the past 30 years, EPA and state water quality agencies have realized the great impact that rain water runoff has on surface waters - streams, rivers, lakes, estuary and ocean waters. Rain water falling on industries, urban areas and construction activities can become contaminated with sediments, suspended solids, nutrients phosphorous and nitrogen, metals, pesticides, organic material and floating trash. These pollutants are then carried into the surface waters. Unlike sanitary wastewater and industrial wastewater, most storm water is not treated prior to entering streams. Pollution of storm water runoff must be prevented at the source.

Federal, state and local governments have passed law and regulations to address the problem of polluted runoff. Phase I EPA storm water regulations initiated a national storm water permitting program in 1990, that applied to industrial activities, to construction sites of five acres or more and to urban runoff from larger cities. Phase II regulations in 1999 address additional urbanized areas, certain cities with population over 10,000, and construction activities of one to five acres.

The Tennessee Department of Environment and Conservation, Division of Water Pollution Control implements the EPA Phase I and Phase II regulations in Tennessee.

EPA Phase I website EPA Phase II website

C. Definition of Phase II MS4s

The following definitions are taken from EPA rules at 40 CFR 122.26(b)
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> **(8)** ***Municipal separate storm sewer*** means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):
> (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;
> (ii) Designed or used for collecting or conveying storm water;
> (iii) Which is not a combined sewer; and
> (iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.2.
>
> **(16)** ***Small municipal separate storm sewer system*** means all separate storm sewers that are:
> (i) Owned or operated by the United States, a state, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to state law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under state law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States.

(ii) Not defined as "large" or "medium" municipal separate storm sewer systems pursuant to paragraphs (b)(4) and (b)(7) of this section, or designated under paragraph (a)(1)(v) of this section. (iii) This term includes systems similar to separate storm sewer systems in municipalities, such as systems at military bases, large hospital or prison complexes, and highways and other thoroughfares. The term does not include separate storm sewers in very discrete areas, such as individual buildings.

(17) ***Small MS4*** means a small municipal separate storm sewer system.

(18) ***Municipal separate storm sewer system*** means all separate storm sewers that are defined as "large" or "medium" or "small" municipal separate storm sewer systems pursuant to paragraphs (b)(4), (b)(7), and (b)(16) of this section, or designated under paragraph (a)(1)(v) of this section.

(19) ***MS4*** means a municipal separate storm sewer system.

D. Number of Phase II MS4s in Tennessee

The state has identified 84 city and county governments subject to the Phase II regulatory program. This does not include military bases, large hospital or prison complexes or highway systems such as TDOT. 66 of the communities are automatically regulated by the EPA rule; 18 are designated by Tennessee.

Information and list of the Phase II MS4s: Phase II web page:
http://www.state.tn.us/environment/wpc/stormh2o/MS4II.htm

On that web page is a document that explains the selection of the phase II MS4s regulated in Tennessee:
http://www.state.tn.us/environment/wpc/stormh2o/MS4explain.pdf

E. Similarity of storm water discharges from small MS4s

Discharges of storm water runoff from MS4s are similar. Sources of runoff consist of construction sites, roads, municipal operations such as garages, schools, storage facilities, golf courses, etc.; residential properties; possibly commercial and industrial properties.

Likewise, the programs - the Phase II six minimum measures - that communities must enact to prevent pollution of runoff are the same. These six minimum measures are required of all the Phase II communities, per the federal Phase II rule. These six minimum measures will be incorporated into this general permit.

It is obvious that every city and county is different. Storm water discharges will vary based on source areas, activities, soils, topography, weather, etc. , and MS4 management programs will vary based types of activities needing regulation and attention in a given municipality, on public input, participation and priorities.

F. Director's opinion of a general permit

Given the similarity of discharges and necessary NPDES permit conditions, it is appropriate to regulate discharges of runoff from small MS4s via a general permit.

II. Description of discharges

As noted above, storm water runoff from MS4s includes runoff from construction sites, roads, municipal operations such as garages, schools, storage facilities, golf courses, etc.; and residential, commercial and industrial properties.

It is important to realize that non-storm water can be introduced into the storm sewer system. For example, illicit discharges of industrial process-related wastewater; dumping of wash water from business operations; car wash water from homes or special car wash events; parking lot wash water; spills and leaks from equipment, vehicles and storage tanks; potable water from water lines and fire hydrants. These are some common sources of contamination in storm sewers. This permit does not authorize the discharge of non-storm water by the MS4 into streams.

III. Description of receiving streams

The receiving streams under consideration in this permit are any to which a regulated MS4 discharges. These may be rivers, large streams and smaller streams, named and unnamed. The term stream is not defined in the state act or water quality rules. The following definitions and discussion are intended to distinguish between MS4s and regulated waters of the state.

Waters of the state are defined in the Tennessee Water Quality Control Act as follows:

> "Waters" means any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.

Wet weather conveyances are conveyances that flow in direct response to precipitation. Wet weather conveyances are not protected under the TN WQCA to the same extent as other waters of the state. The definition of wet weather conveyance follows:

> Wet weather conveyances are man-made or natural watercourses, including natural watercourses that have been modified by channelization, that flow only in direct response to precipitation runoff in their immediate locality and whose channels are above the groundwater table and which do not support fish and aquatic life and are not suitable for drinking water supplies. 1200-4-3-.04(4)
>
> and
>
> Waters designated as wet weather conveyances according to the definitions found in 1200-4-3-.04(4) shall be protective of humans and wildlife that may come into contact with them and shall not degrade or adversely affect the quality of downstream waters. Applicable water quality standards will be maintained downstream of wet weather conveyances. 1200-4-3-.02(7)

By state rule 1200-4-4, waters are classified for various uses. Practically all waters, with the exception of wet weather conveyances, are classified for fish and aquatic life, livestock watering and wildlife, irrigation and recreation. For each use, rule 1200-4-3 establishes a set of water quality criteria. The state, through regulatory and other means, strives to maintain and to restore waters to these standards. Wet weather conveyances are also regulated but not the same as waters that support fish and aquatic life, as noted below.

There is also a distinction, made via the NPDES permit itself, between waters in a wet weather conveyance owned or operated by the regulated MS4 and waters to which that conveyance discharges. The city or county-owned wet weather conveyance does convey waters of the state (e.g. storm water runoff), but the NPDES permit describes the permittee's conveyance as discharging to waters of the state. This is a convention used in part because the state generally focuses its regulatory effort on receiving waters after a discharge has exited a permittee's conveyance.

Thus, where the NPDES permit authorizes discharges into waters of the state, it refers to points where city or county--operated storm sewers discharge into wet weather conveyances owned or operated by another MS4, or into waters with with use classifications designated by the state.

IV. Permit condition methodology

The NPDES permit must include conditions that require a permittee to implement effective means to reduce or eliminate contamination in its discharge(s). In the case of an NPDES permit for discharges of storm water from an MS4, this level of control is referred to as the maximum extent practicable (MEP). The NPDES permit must also include conditions such that the discharges authorized by the permit are not allowed to cause or contribute to pollution of waters of the state. Following is more information on these two regulatory mechanisms.

A. Maximum Extent Practicable (MEP) - technology-based permit limitations

The Water Quality Act of 1987, which set up the present NPDES permit requirements for discharges of urban runoff, requires that the such permits:

> a. include a requirement to effectively prohibit non-storm water discharges into the storm sewers; and
> b. require the permittees to reduce pollutants in discharges from the MS4 to the "Maximum Extent Practicable" (MEP).

EPA explains how the MEP standard will be incorporated into small MS4 permits, in the preamble to the December 8, 1999, Phase II storm water rule, beginning on page 68754:

Maximum extent practicable (MEP) is the statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve. The CWA requires that NPDES permits for discharges from MS4s "shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods." CWA Section 402(p)(3)(B)(iii). This section also calls for "such other provisions as the [EPA] Administrator or the State determines appropriate for the control of such pollutants." EPA interprets this standard to apply to all MS4s, including both existing regulated (large and medium) MS4s, as well as the small MS4s regulated under today's rule.

For regulated small MS4s under today's rule, authorization to discharge may be under either a general permit or individual permit....Compliance with the conditions of the general permit and the series of steps associated with identification and implementation of the minimum control measures will satisfy the MEP standard. Implementation of the MEP standard under today's rule will typically require the permittee to develop and implement appropriate BMPs to satisfy each of the required six minimum control measures.

B. Water-quality based permit limitations and the EPA interim guidance policy (8/1/1996)

The state intends to implement water-quality based permit conditions in a manner as expressed by EPA in the December 8, 1999, preamble to the Phase II NPDES regulation, beginning on page 68753. The introduction reads:

> Any NPDES permit issued under today's rule must, at a minimum, require the operator to develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from a regulated system to the MEP, to protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act (see MEP discussion in the following section). Absent evidence to the contrary, EPA presumes that a small MS4 program that implements the six minimum measures in today's rule does not require more stringent limitations to meet water quality standards. Proper implementation of the measures will significantly improve water quality. As discussed further below, however,

> small MS4 permittees should modify their programs if and when available information indicates that water quality considerations warrant greater attention or prescriptiveness in specific components of the municipal program. If the program is inadequate to protect water quality, including water quality standards, then the permit will need to be modified to include any more stringent limitations necessary to protect water quality.

The full text of this section of the preamble is given in endnote [i] .

Some background discussion of the issue of water-quality based limits in MS4 permits can also be found in the EPA memorandum "Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits." Here is the link to a pdf format copy of the document: http://www.epa.gov/npdes/pubs/swpol.pdf. This policy was published in the federal register November 26, 1996. [61 FR 43761 (November 26, 1996)]

V. Permit writer's approach to establishing permit conditions

The permit writer proposes to use the statements of the six minimum measures, as written by the EPA in the Phase II final rule, as NPDES permit conditions. These will form the backbone of the general permit requirements. Some wording changes will be necessary to agree with Tennessee rules. A few additional, specific items will be added.

Reasons for this approach include:

i. given that each regulated MS4 is different, it would be difficult or impossible for the permit writer to specify details of BMPs and how to implement a storm water quality management program, to a greater level of detail than the EPA six minimum measures;
ii. the EPA rule is written in a "readable regulations" format; it as fairly easy to read and understand; and
iii. the EPA rule has been in the public domain since December, 1999, and has been the basis for state and national training on the requirements of the Phase II programs; to use this language is to use language and requirements with which federal, state, city and county officials are familiar.

Also, this draft permit proposes deadlines for implementing certain BMPs.

VI. Proposed permit conditions – the six minimum measures

The EPA rule of December, 1999, presents the six minimum measures at 40 CFR 122.34. In the December 8, 1999, rule, this begins on page 68843. In this outline, they are numbered as follows:

A. Public Education and Outreach
B. Public Participation/Involvement
C. Illicit Discharge Detection and Elimination
D. Construction Site Runoff Control
E. Post-Construction Runoff Control
F. Pollution Prevention/Good Housekeeping

A. Public Education and Outreach

1. The EPA minimum requirement reads as follows:

> You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff.

2. EPA provides guidance as follows:

> Guidance: You may use storm water educational materials provided by your State, Tribe, EPA, environmental, public interest or trade organizations, or other MS4s. The public education program should inform individuals and households about the steps they can take to reduce storm water pollution, such as ensuring proper septic system maintenance, ensuring the proper use and disposal of landscape and garden chemicals including fertilizers and pesticides, protecting and restoring riparian vegetation, and properly disposing of used motor oil or household hazardous wastes. EPA recommends that the program inform individuals and groups how to become involved in local stream and beach restoration activities as well as activities that are coordinated by youth service and conservation corps or other citizen groups. EPA recommends that the public education program be tailored, using a mix of locally appropriate strategies, to target specific audiences and communities. Examples of strategies include distributing brochures or fact sheets, sponsoring speaking engagements before community groups, providing public service announcements, implementing educational programs targeted at school age children, and conducting community- based projects such as storm drain stenciling, and watershed and beach cleanups. In addition, EPA recommends that some of the materials or outreach programs be directed toward targeted groups of commercial, industrial, and institutional entities likely to have significant storm water impacts. For example, providing information to restaurants on the impact of grease clogging storm drains and to garages on the impact of oil discharges. You are encouraged to tailor your outreach program to address the viewpoints and concerns of all communities, particularly minority and disadvantaged communities, as well as any special concerns relating to children.

3. Discussion and rationale for specific requirements

The state proposes to include a requirement that MS4s investigate local and state regulations with respect to grease traps, waste disposal, and site cleanliness at restaurants. The MS4 should then ensure that restaurants have been made aware of a clear set of requirements with respect to storm water management.

4. Proposed permit requirement

Same as federal minimum requirement above, plus the following language.

After you ascertain local and state regulations that apply to grease traps, waste disposal and site cleanliness at restaurants and similar food service establishments, you must prepare a clear set of requirements with respect to storm water management at these establishments and ensure that the restaurants and similar food service establishments have been made aware of those requirements.

B. Public Participation/Involvement

1. The EPA requirement reads as follows:

> You must, at a minimum, comply with State, Tribal and local public notice requirements when implementing a public involvement/ participation program.

2. EPA provides guidance as follows:

> Guidance: EPA recommends that the public be included in developing, implementing, and reviewing your storm water management program and that the public participation process should make efforts to reach out and engage all economic and ethnic groups. Opportunities for members of the public to participate in program development and implementation include serving as citizen representatives on a local storm water

management panel, attending public hearings, working as citizen volunteers to educate other individuals about the program, assisting in program coordination with other pre-existing programs, or participating in volunteer monitoring efforts.

3. Discussion and rationale for specific requirements

The state understands the minimum requirement to mean that a local government must provide public notice – as required by local or state public notice requirements – insofar as they apply to any actions taken by the local government in developing and implementing components of a storm water management program. For instance, a public notice would normally be required when the local government proposes to enact a storm water management ordinance.

4. Proposed permit requirement

Same as federal minimum requirement above.

C. Illicit Discharge Detection and Elimination

1. The EPA minimum requirement reads as follows:

(i) You must develop, implement and enforce a program to detect and eliminate illicit discharges (as defined at Sec. 122.26(b)(2)) into your small MS4.
(ii) You must:
(A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls;
(B) To the extent allowable under State, Tribal or local law, effectively prohibit, through ordinance, or other regulatory mechanism, non-storm water discharges into your storm sewer system and implement appropriate enforcement procedures and actions;
(C) Develop and implement a plan to detect and address non-storm water discharges, including illegal dumping, to your system; and
(D) Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.
(iii) You need address the following categories of non-storm water discharges or flows (i.e., illicit discharges) only if you identify them as significant contributors of pollutants to your small MS4: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)), uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (discharges or flows from fire fighting activities are excluded from the effective prohibition against non-storm water and need only be addressed where they are identified as significant sources of pollutants to waters of the United States).

2. EPA provides guidance as follows:

Guidance: EPA recommends that the plan to detect and address illicit discharges include the following four components: procedures for locating priority areas likely to have illicit discharges; procedures for tracing the source of an illicit discharge; procedures for removing the source of the discharge; and procedures for program evaluation and assessment. EPA recommends visually screening outfalls during dry weather and conducting field tests of selected pollutants as part of the procedures for locating priority areas. Illicit discharge education actions may include storm drain stenciling, a program to

promote, publicize, and facilitate public reporting of illicit connections or discharges, and distribution of outreach materials.

3. Discussion and rationale for specific requirements

Item (ii) (A) of the federal rule requires that an MS4 develop a map, showing the location of all outfalls to waters of the United States. Because of different definitions of waters of the US and "waters of the state," the Tennessee requirement will be worded differently. See above discussion under section 3. above.

We will refer to waters of the state of Tennessee, and particularly to waters designated for classified uses. In effect, the permit will require that MS4s develop a map that at a minimum identifies points or outfalls where city or county-operated wet weather conveyances enter streams. Usually these streams can be identified as blue-line or intermittent blue-line streams on a USGS 1:24,000 quadrangle map.

The Nashville MS4 permit contained a condition requiring the city to investigate ways to minimize contamination of runoff from restaurants. This proved to be a useful investigation for the city and led to education of restaurant operators and better knowledge on the part of regulators about waste management practices at restaurants. We propose to include a similar requirement in this phase II general permit. See VI.A above in the education minimum measure.

4. Implementation date:

We view a legal prohibition on non-storm water discharges into the storm sewer system as fundamental to management of the MS4. We propose that the required ordinance or other regulatory mechanism be effective within 18 months of notice of coverage issued to the MS4.

5. Proposed permit requirements

Same as federal minimum requirements, except for a change in wording as noted in italics below, related to definition of illicit discharge and definition of outfall, and the addition of language related to restaurants and various commercial and industrial properties:

(i) You must develop, implement and enforce a program to detect and eliminate illicit discharges *(as defined in this permit)* into your small MS4.
(ii) You must:
(A) Develop, if not already completed, a storm sewer system map, showing the location of all outfalls *(i.e., points where the city or county-operated storm sewer system discharges into wet weather conveyances owned or operated by another MS4, or into waters with use classifications designated by the state.)* and the names and location of all use-designated waters of the state that receive discharges from those outfalls;…

Items (ii)(B) through (D) and (iii) remain the same as in the federal rule above.

Addition of the following language:

You must be able, by ordinance or other regulatory mechanism, to prohibit contamination of storm water runoff from industrial and commercial properties, including restaurants and auto repair shops, auto supply shops, large commercial parking areas.

D. Construction Site Runoff Control

1. The EPA minimum requirement reads as follows:

(i) You must develop, implement, and enforce a program to reduce pollutants in storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.
(ii) Your program must include the development and implementation of, at a minimum:
(A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
(B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
(C) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
(D) Procedures for site plan review which incorporate consideration of potential water quality impacts;
(E) Procedures for receipt and consideration of information submitted by the public, and
(F) Procedures for site inspection and enforcement of control measures.

2. EPA provides guidance as follows:

Guidance: Examples of sanctions to ensure compliance include non-monetary penalties, fines, bonding requirements and/or permit denials for non-compliance. EPA recommends that procedures for site plan review include the review of individual pre-construction site plans to ensure consistency with local sediment and erosion control requirements. Procedures for site inspections and enforcement of control measures could include steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water quality. You are encouraged to provide appropriate educational and training measures for construction site operators. You may wish to require a storm water pollution prevention plan for construction sites within your jurisdiction that discharge into your system. See Sec. 122.44(s) (NPDES permitting authorities' option to incorporate qualifying State, Tribal and local erosion and sediment control programs into NPDES permits for storm water discharges from construction sites). Also see Sec. 122.35(b) (The NPDES permitting authority may recognize that another government entity, including the permitting authority, may be responsible for implementing one or more of the minimum measures on your behalf.)

3. Discussion and rationale for specific requirements

- Will there be dual permitting – both state and local – of construction sites within regulated MS4s? If so, which review should come first? To whom will applications be submitted? How will local MS4 requirements correspond with state NPDES requirements? Will local requirements and state requirements agree? Etc.

  According to the phase II requirements quoted above, a local MS4 must put in place an ordinance or other regulatory mechanism to require erosion and sediment controls at construction activities and must perform review of erosion and sediment control plans. This local requirement does not set aside the NPDES permitting requirement, administered by the state of Tennessee, for construction sites of five acres or more and beginning in March, 2003, one acre or more. There will be both a local construction site runoff control program and a state program. Construction site operators must comply with both.

We expect local review of construction activities and erosion and sediment control plans will be more extensive and thorough than the state review. Accordingly, we think it is better that construction site operators obtain coverage under the state NPDES permit prior to receiving approval from the local government. As drafted, this permit includes the requirement that the local MS4 have protocal in place so that the local construction activity permit is not issued unless the activity is covered under the state's construction runoff general permit (CGP). See the third paragraph down for a possible exception to this.

Considering that over 80 communities will be establishing construction site runoff control programs, the believes it is important that the technical standards be very much the same across the state. Rather than having developers to face 80 different design criteria for sediment and erosion controls across the state, they will have the same basic requirements statewide. Thus, we propose establishing some minimum program and design standards. See below for the details.

The state requests comments on these items.

NPDES regulations will allow the state to authorize runoff from small construction sites (less than five acres) without a permit application. That is, the state can set up a permitting system/general permit that automatically covers all small construction sites. Or, for instance, in areas where there is a local MS4 construction site runoff control program, the state could set up a permit that automatically covers projects (less that five acres) that have obtained approval of the local government. Such a system would save developers from having to submit paperwork to both the state and the local government.

The state requests comments on this issue.

- Minimum standards of oversight -- erosion and sediment control technical standards; plans review; inspections

  The EPA phase II rule sets forth broadly-described minimum requirements. The state believes we need to add detail in order to provide for some consistency statewide and standards that will ensure effective local programs.

  As explained above, we propose to make local programs consistent statewide on several technical criteria. These criteria are taken from the state's construction general permit in condensed fashion here.

  - Necessity of an erosion prevention and sediment control pollution prevention plan
  - Pre-construction vegetative ground cover shall not be disturbed more than 20 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.
  - Construction must be sequenced and phased to minimize exposure of bare soil, with no disturbance more than 20 days prior to grading or earth moving
  - Temporary or permanent soil stabilization shall be accomplished within 15 days after final grading or other earth work.
  - Erosion and sediment control measures shall be designed to control the rainfall and runoff from a 2 year, 24 hour storm, as a minimum.
  - For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from a 2 year, 24 hour storm and runoff coefficient from each disturbed acre drained, or equivalent control measures, shall be provided until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site.

The state proposes that MS4s define and address priority construction sites. Priority construction sites must include those discharging directly into, or immediately upstream of, waters the state recognizes as impaired or high quality. The local MS4 may define other construction sites (for instance, in headwaters; in areas of high land development; etc.) or all construction sites as priority. For *priority construction sites*, the MS4 must:

- ❑ hold pre-construction meetings, with construction-site operators; and
- ❑ perform inspections at least once per month.

This permit is requiring that MS4s set up a program to protect and maintain streamside forested buffers. This requirment will be defined in the post-construction runoff control program requirements. During construction, such buffers will provide significant protection of the stream in addition to installed erosion and sediment controls.

- For providing statewide consistency and expertise, the permit requires that local government MS4 staff obtain certification in the UT WRRC/ TDEC erosion and sediment control training classes – Fundamentals of Erosion Prevention and Sediment Control; and the Erosion Prevention and Sediment Control Design Course. The first of these has been taught since 2001. The second will be available beginning in 2003.

4. Implementation date

MS4 must have the regulatory mechanism in place within 18 months of coverage under this permit. No later than 24 months, the MS4 must be implementing plans review and inspections of construction priority construction sites.

5. Proposed permit requirements

Same as federal minimum requirements, with the addition of item (ii)(C), and addition of items (iii) & (iv) as noted in italics below:

(i) You must develop, implement, and enforce a program to reduce pollutants in storm water runoff to your small MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of storm water discharges from construction activity disturbing less than one acre must be included in your program if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more.
(ii) Your program must include the development and implementation of, at a minimum:
(A) An ordinance or other regulatory mechanism to require erosion and sediment controls, as well as sanctions to ensure compliance, to the extent allowable under State, Tribal, or local law;
(B) Requirements for construction site operators to implement appropriate erosion and sediment control best management practices;
(C) Requirements corresponding to the Tennessee Construction General Permit, effective July 1, 2000:

- *Necessity of an erosion prevention and sediment control pollution prevention plan*
- *Pre-construction vegetative ground cover shall not be disturbed more than 20 calendar days prior to grading or earth moving unless the area is seeded and/or mulched or other temporary cover is installed.*
- *Construction must be sequenced and phased to minimize exposure of bare soil, with no disturbance more than 20 days prior to grading or earth moving.*
- *Temporary or permanent soil stabilization shall be accomplished within 15 days after final grading or other earth work.*
- *Erosion and sediment control measures shall be designed to control the rainfall and runoff from a 2 year, 24 hour storm, as a minimum.*

- *For common drainage locations that serve an area with 10 or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from a 2 year, 24 hour storm and runoff coefficient from each disturbed acre drained, or equivalent control measures, shall be provided until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided until final stabilization of the site.*

(D) Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality;
(E) Procedures for site plan review which incorporate consideration of potential water quality impacts;
(F) Procedures for receipt and consideration of information submitted by the public; and
(G) Procedures for site inspection and enforcement of control measures.

(iii) Your staff must be trained in the fundamentals of erosion prevention and sediment control and in how to review erosion and sediment control plans. At a minimum, this training must include the Tennessee Fundamentals of Erosion Prevention and Sediment Control; and the Erosion Prevention and Sediment Control Design Course.

(iv) Your program must provide for the following:
(a) Recognition of priority construction activity, including at a minimum those construction activities discharging directly into, or immediately upstream of, waters the state recognizes as impaired(for siltation) or high quality;
(b) Pre-construction meetings with construction-site operators, for priority construction activities; and
(c) Inspections by the MS4 of priority construction sites at least once per month.

E. Post-Construction Runoff Control

1. The EPA minimum requirement reads as follows:

(i) You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.
(ii) You must:
(A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
(B) Use an ordinance or other regulatory mechanism to address post- construction runoff from new development and redevelopment projects to the extent allowable under State, Tribal or local law; and
(C) Ensure adequate long-term operation and maintenance of BMPs.

2. EPA provides guidance as follows:

Guidance: If water quality impacts are considered from the beginning stages of a project, new development and potentially redevelopment provide more opportunities for water quality protection. EPA recommends that the BMPs chosen: be appropriate for the local community; minimize water quality impacts; and attempt to maintain pre- development runoff conditions. In choosing appropriate BMPs, EPA encourages you to participate in locally-based watershed planning efforts which attempt to involve a diverse group of stakeholders including interested citizens. When developing a program that is consistent

with this measure's intent, EPA recommends that you adopt a planning process that identifies the municipality's program goals (e.g., minimize water quality impacts resulting from post-construction runoff from new development and redevelopment), implementation strategies (e.g., adopt a combination of structural and/or non- structural BMPs), operation and maintenance policies and procedures, and enforcement procedures. In developing your program, you should consider assessing existing ordinances, policies, programs and studies that address storm water runoff quality. In addition to assessing these existing documents and programs, you should provide opportunities to the public to participate in the development of the program. Non- structural BMPs are preventative actions that involve management and source controls such as: policies and ordinances that provide requirements and standards to direct growth to identified areas, protect sensitive areas such as wetlands and riparian areas, maintain and/or increase open space (including a dedicated funding source for open space acquisition), provide buffers along sensitive water bodies, minimize impervious surfaces, and minimize disturbance of soils and vegetation; policies or ordinances that encourage infill development in higher density urban areas, and areas with existing infrastructure; education programs for developers and the public about project designs that minimize water quality impacts; and measures such as minimization of percent impervious area after development and minimization of directly connected impervious areas. Structural BMPs include: storage practices such as wet ponds and extended-detention outlet structures; filtration practices such as grassed swales, sand filters and filter strips; and infiltration practices such as infiltration basins and infiltration trenches. EPA recommends that you ensure the appropriate implementation of the structural BMPs by considering some or all of the following: pre-construction review of BMP designs; inspections during construction to verify BMPs are built as designed; post-construction inspection and maintenance of BMPs; and penalty provisions for the noncompliance with design, construction or operation and maintenance. Storm water technologies are constantly being improved, and EPA recommends that your requirements be responsive to these changes, developments or improvements in control technologies.

3. Discussion and rationale for specific requirements

In addition to the EPA minimum requirements, the state proposes to require the MS4s to establish a streamside buffer program. Streamside buffers can protect water quality and provide other benefits as well, as summarized below from the Buffer Model Ordinance at stormwatercenter.net.

> Buffers adjacent to stream systems and coastal areas provide numerous environmental protection and resource management benefits that can include the following:
>
> - Restoring and maintaining the chemical, physical, and biological integrity of the water resources
> - Removing pollutants delivered from urban stormwater
> - Reducing erosion and sediment entering the stream
> - Stabilizing stream banks
> - Providing infiltration of stormwater runoff
> - Maintaining base flow of streams
> - Contributing the organic matter that is a source of food and energy for the aquatic ecosystem
> - Providing tree canopy to shade streams and promote desirable aquatic organisms
> - Providing riparian wildlife habitat
> - Furnishing scenic value and recreational opportunity

The division believes that streamside buffers are understandable, practical and provide very effective protection of streams, and proposes the following requirement in the permit:

You must must develop and implement a set of requirements to protect and maintain riparian buffers in areas of new development and redevelopment.

Buffer is defined as a vegetated area, including trees, shrubs and herbaceous vegetation, which exists or is established to protect a stream system, lake, or reservoir area.

4. Proposed permit requirement

Same as federal minimum requirements, except for the addition related to riparian buffers.

(i) You must develop, implement, and enforce a program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into your small MS4. Your program must ensure that controls are in place that would prevent or minimize water quality impacts.
(ii) You must:
(A) Develop and implement strategies which include a combination of structural and/or non-structural best management practices (BMPs) appropriate for your community;
(B) *You must must develop and implement a set of requirements to protect and maintain riparian buffers in areas of new development and redevelopment;*
(B) Use an ordinance or other regulatory mechanism to address post- construction runoff from new development and redevelopment projects to the extent allowable under *state or local law*; and
(C) Ensure adequate long-term operation and maintenance of BMPs.

F. Pollution Prevention/Good Housekeeping

1. The EPA minimum requirement reads as follows:

> You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

2. EPA provides guidance as follows:

> Guidance: EPA recommends that, at a minimum, you consider the following in developing your program: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance should be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

3. Discussion and rationale for specific requirements

The division would like to add greater definition to the EPA minimum requirement and proposes to include the EPA guidance as a part of the general permit requirement.

4. Proposed permit requirement

The federal minimum requirements with the addition of the substance of the federal guidance. Note that the third from last sentence in the guidance paragraph, concerning operation and maintenance, is revised to say that "operation and maintenance must be an integral part…" instead of "should be."

You must develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations. Using training materials that are available from EPA, your State, Tribe, or other organizations, your program must include employee training to prevent and reduce storm water pollution from activities such as park and open space maintenance, fleet and building maintenance, new construction and land disturbances, and storm water system maintenance.

You must consider the following in developing your program: maintenance activities, maintenance schedules, and long-term inspection procedures for structural and non-structural storm water controls to reduce floatables and other pollutants discharged from your separate storm sewers; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, fleet or maintenance shops with outdoor storage areas, salt/sand storage locations and snow disposal areas operated by you, and waste transfer stations; procedures for properly disposing of waste removed from the separate storm sewers and areas listed above (such as dredge spoil, accumulated sediments, floatables, and other debris); and ways to ensure that new flood management projects assess the impacts on water quality and examine existing projects for incorporating additional water quality protection devices or practices. Operation and maintenance must be an integral component of all storm water management programs. This measure is intended to improve the efficiency of these programs and require new programs where necessary. Properly developed and implemented operation and maintenance programs reduce the risk of water quality problems.

VII. Special permit requirements

A. Area of permit coverage

This permit covers all areas of the state of Tennessee. It is designed to cover particularly those areas that have been designated under the federal and state phase II regulations and programs. As mentioned in Part I.D above of this rationale sheet, these areas are described and listed in the following document, "Phase II Storm Water Communities in Tennessee Local Government MS4s Regulated by EPA Rule & Designated by Tennessee September 9, 2002." Web link to this document is http://www.state.tn.us/environment/wpc/stormh2o/MS4explain.pdf.

Of special interest and importance is the question of what part of regulated counties and cities are subject to the phase II requirements. The document above answers this question:

> Counties…are responsible to submit permit application material and implement complete Phase II programs only for those portions of the county that are urbanized, according to the Census Bureau's most recent definition and data. The cities…are responsible to carry out Phase II programs in all of the city.

B. Limitations on permit coverage

This permit will not authorize:

i. non-storm water discharges;
ii. storm water discharges associated with industrial activity;
iii. storm water discharges associated with construction activity;
iv. storm water discharges currently covered under another permit;
v. discharges that are likely to harm federally threatened or endangered species or adversely modify or destroy critical habitat

Various non-storm water discharges can be allowed, by the local government, into the MS4, provided they have been determined not to contribute a substantial amount of pollutants to the MS4 and to classified-use waters of the state.

Water line flushing	Landscape irrigation
Diverted stream flows	Rising ground waters
Uncontaminated ground water	Uncontaminated pumped ground water
Discharges from potable water sources	Foundation drains
Air conditioning condensate	Irrigation water
Springs	Water from crawl space pumps
Footing drains	Lawn watering
Individual residential car washing	Flows from riparian habitats and wetlands
Dechlorinated swimming pool discharges	Street wash water
Discharges or flows from fire fighting activities	

The permit does not cover the discharge of storm water from any entity not listed in the notice of coverage. It does not cover discharges from any other entity located in the drainage area or outside the drainage area, unless such entity is listed as a co-permittee in the notice of coverage issued by the state. Only the systems named in the notice of coverage and the portions of the storm sewer system that are under those systems' operational control are covered by this permit.

C. For impaired waters and waters addressed by a TMDL

The permit will include a number of conditions to direct the MS4 to assess and protect impaired waters.

The following format is taken from EPA guidance. The MS4 must:

i. determine whether its storm water discharges significantly contributes directly or indirectly to a 303(d)listed (i.e.,impaired) waterbody and whether a total maximum daily load (TMDL) has been developed and approved by EPA for the listed waterbody; and
ii. if storm water discharges contribute to stream impairment, the storm water management program (SWMP) must include a section describing how the program will control the discharge of the pollutants of concern and ensure discharges will not cause or contribute to instream exceedances of the water quality standards; and
iii. if a TMDL has been approved for any waterbody into which the MS4 discharges:
    a. the MS4 must determine the extent to which the TMDL applies to pollutants likely to be found in the storm water discharges and whether the TMDL includes a wasteload allocation specifically for storm water discharges; if so:
    b. assess whether the WLAs are being met through implementation of existing storm water control measures or if additional control measures are necessary;
    c. document all control measures currently being implemented or planned to be implemented; include a schedule of implementation for all planned controls; document calculations and evidence that shows the WLA will be met;

d. describe a method to evaluate whether the storm water controls are adequate to meet the WLA;
e. if the evaluation shows that additional or modified controls are necessary, describe the type and schedule for the control additions/revisions.

D. For waters hosting threatened and endangered species

The permit will contain conditions designed to ensure protection federally and state listed threatened or endangered species. Web sites are available for information on the federal Endangered Species Act and the state's natural heritage program: http://endangered.fws.gov/whatwedo.html; http://www.state.tn.us/environment/nh/.

The following requirements are proposed to be included in the small MS4 permit.

a. Permit Coverage Restrictions: In order to be eligible for coverage under this permit, the applicant/permittee must be in compliance with the Endangered Species Act.

b. A discharge of storm water may be covered under the permit only if:

(1) The storm water discharges, allowable non-storm water discharges, and discharge-related activities are not likely to adversely affect species identified as listed threatened or endangered. This can be found via an EPA web site, Searchable List of Endangered Species by State and County; or

(2) Storm water discharges, allowable non-storm water discharges, and discharge-related activities have received previous authorization under the Endangered Species Act and has established an environmental baseline that is unchanged; or

(3) The applicant is implementing appropriate measures as required by the Director to address adverse affects of its storm water discharges, BMPs and construction of BMPs; and

c. Permittees applying for or obtaining coverage under the permit must certify, on or before the first annual report and in each annual report thereafter, that storm water discharges, allowable non-storm water discharges, and discharge-related activities are not likely to adversely affect federally listed threatened and endangered species.

d. Storm water discharges and storm water discharge-related activities that are not protective of legally protected listed threatened or endangered aquatic fauna in the receiving stream(s); or discharges or activities that would result in a "take" of a federally listed endangered or threatened fish or wildlife species; if the state finds that storm water discharges or storm water related activities are likely to result in the above effects, the state will deny the coverage under this general permit unless and until project plans are changed to protect the listed species.

VIII. Administrative issues

A. Co-permittees

The state believes it is advantageous for multiple MS4s to partner with one another to accomplish area-wide MS4 programs with similar BMPs. Because of this, we propose that the general permit accommodate co-permittees. That is, two or more neighboring MS4 communities may be covered together under this general permit. See EPA rule provision at 40 CFR 122.33 (b).[ii] MS4s may partner without being co-permittees.

The division think there are two criteria necessary for this permit to accommodate co-permittees. One is that the co-permittees must propose the same set of BMPs. The same public education BMPs and measurable goals, the same public participation plan, the same construction site runoff control programs,

etc. The second criterion is that this permit must provide that one co-permittee is not considered in violation of the permit if another co-permittee is in violation of the permit. See the permit part 3.3 for the details of co-permittee responsibilities.

As far as submittal of NOIs, at present the draft NOI form is designed to be completed by a single MS4. Thus, if several MS4s desire to be covered under the general permit as co-permittees, they must each submit an NOI. These NOIs should be submitted together, each with the signature of the responsible official, and a cover letter requesting the two or more MS4s be co-permittees. The NOIs must delineate clearly responsibilities of each of the co-permittees.

Note that if two or more MS4 communities form a legal entity – a storm water utility, for example – with authorities to carry out all of the phase II permit responsibilities, then the state would accept a single NOI from the utility, signed by the appropriate officer or chairperson of the utility. The state would recognize this entity as one, and co-permittees would not be necessary.

Note also that if a number of MS4s desire a single permit that uniquely represents the various copermittees, the state will be able to process an *individual* application from a set of co-applicants and issue an individual NPDES permit with co-permittees. Contact the state for more detail on this option.

B. Fees

The division's fee rule includes an annual maintenance fee for small MS4s. Our fee rule sets an annual fee of $2500 for small MS4s. MS4s are required to pay this fee based on invoice from the department.

The fee rule can be found at the secretary of state's web page: http://www.state.tn.us/sos/rules/1200/1200-04/1200-04-11.pdf.

C. Compliance options for small MS4s under this permit

1. Relying on another entity

The permit will contain provisions that allow an MS4 to rely on another entity to satisfy some or all of the NPDES permit obligations.

The following is taken from the EPA phase II regulation, 40 CFR 122.35.

(a) You may rely on another entity to satisfy your NPDES permit obligations to implement a minimum control measure if:
(1) The other entity, in fact, implements the control measure;
(2) The particular control measure, or component thereof, is at least as stringent as the corresponding NPDES permit requirement; and
(3) The other entity agrees to implement the control measure on your behalf. In the reports you must submit under Sec. 122.34(g)(3), you must also specify that you rely on another entity to satisfy some of your permit obligations. If you are relying on another governmental entity regulated under section 122 to satisfy all of your permit obligations, including your obligation to file periodic reports required by Sec. 122.34(g)(3), you must note that fact in your NOI, but you are not required to file the periodic reports. You remain responsible for compliance with your permit obligations if the other entity fails to implement the control measure (or component thereof). Therefore, EPA encourages you to enter into a legally binding agreement with that entity if you want to minimize any uncertainty about compliance with your permit.
(b) In some cases, the NPDES permitting authority may recognize, either in your individual NPDES permit or in an NPDES general permit, that another governmental entity is responsible under an NPDES permit for implementing one or more of the minimum control measures for your small MS4 or that the permitting authority itself is responsible. Where the permitting authority does so, you are not required to include such minimum control measure(s) in your storm water

management program. (For example, if a State or Tribe is subject to an NPDES permit that requires it to administer a program to control construction site runoff at the State or Tribal level and that program satisfies all of the requirements of Sec. 122.34(b)(4), you could avoid responsibility for the construction measure, but would be responsible for the remaining minimum control measures.) Your permit may be reopened and modified to include the requirement to implement a minimum control measure if the entity fails to implement it.

2. Qualifying state or other local program

The permit will include a provision allowing and recognizing a qualifying local program to implement elements of the six minimum measures. Presently, the state is not aware of any such qualifying local programs, in the sense described above. The only entities that might perform the role of a qualifying local program are the phase I MS4 permittees – Memphis, Nashville, Knoxville and Chattanooga. At present, however, those NPDES permits do not require the phase I MS4s to implement storm water quality management programs outside their jurisdictions and in the jurisdiction of any small MS4s.

IX. Notice of intent requirements and processing

A. Notice of Intent (NOI)

The division has developed a Notice of Intent Form. One can find this on our web page - http://www.state.tn.us/environment/wpc/stormh2o/MS4II.htm - in both MS Word document and pdf format. The MS Word document can be used by the applicant, to fill in the blanks.

Note: our experience with the NOI MS Word document is that it requires a large amount of printer memory and time to print; one may have problems with the printing of this form.

B. Submittal of notice of intent

If the applicant submits a hard-copy of the notice of intent, he or she must submit two copies to the environmental assistance center responsible for area where the MS4 is located.

Applications may be submitted electronically instead. In this case, an e-mail with the completed application and attachments (such as map and city ordinances) should be sent to phase.two@state.tn.us. The applicant must send an original letter, signed by the responsible official, documenting the source of the e-mail transmission and the exact time that the electronic application was submitted. The letter must contain the signatory statement found on page three of the NOI form.

The Notice of Intent (NOI) shall be signed as follows:

For a municipality, State, Federal, or other public agency, by either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) The chief executive officer of the agency, or

(ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

"*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant*

penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signature	Title	Date

X. Permit Issuance Procedures

A. Administration

This general permit is drafted in accordance with applicable NPDES regulations (40 CFR 122, 123, 124 and 125), the Tennessee Water Quality Control Act (§ 69-3-101 et seq.), and the Department's permit issuance regulations (Rules of the Department 1200-4-10-.01, -.02, -03).

Permittees under this general permit will be assigned permit tracking numbers in the form, TNS0_____, where the permit is assigned a five digit number such as TNS075663 (Shelby County).

B. NPDES Procedures

The applicable regulations for issuance of this general permit are 40 CFR 122.28, 123.44 and fact sheet requirements at 124.8 and 124.56.

C. Schedule for Permit Issuance

Following are tentative dates associated with this general permit issuance process:

Public Notice:	November 25, 2002
Draft permit transmittal to EPA:	November 12, 2002
Public Hearings:	December 17, 2002, Memphis, 1:30 pm CST University of Memphis – Engineering Building Auditorium (south of Central Avenue; 1st building west of Zach Curlin Street)
	December 18, Knoxville, 1:30 pm EST 2700 Middlebrook Pike, Large Conference Room
	December 19, 2002, Nashville, 5:30 pm CST 401 Church Street, L&C Tower, 17th Floor
Close of comment period:	December 31, 2002
Issuance Date:	February 1, 2003.

D. Consideration of Comments and Permit Issuance Decisions

The Division of Water Pollution Control proposes to issue this permit with the described effluent limitations, monitoring and reporting requirements and standard conditions. These conditions are tentative and open to comment. Interested persons are invited to submit comments for consideration, by letter or at the scheduled public hearing.

Hearings will be held as noted above.

Comments should be submitted to the following address:

Division of Water Pollution Control
ATTN: Robert L. Haley, III
6th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1534

And/or by e-mail to phase.two@state.tn.us

[i] ii. Water Quality-Based Requirements. Any NPDES permit issued under today's rule must, at a minimum, require the operator to develop, implement, and enforce a storm water management program designed to reduce the discharge of pollutants from a regulated system to the MEP, to protect water quality, and satisfy the appropriate water quality requirements of the Clean Water Act (see MEP discussion in the following section). Absent evidence to the contrary, EPA presumes that a small MS4 program that implements the six minimum measures in today's rule does not require more stringent limitations to meet water quality standards. Proper implementation of the measures will significantly improve water quality. As discussed further below, however, small MS4 permittees should modify their programs if and when available information indicates that water quality considerations warrant greater attention or prescriptiveness in specific components of the municipal program. If the program is inadequate to protect water quality, including water quality standards, then the permit will need to be modified to include any more stringent limitations necessary to protect water quality.

Regardless of the basis for the development of the effluent limitations (whether designed to implement the six minimum measures or more stringent or prescriptive limitations to protect water quality), EPA considers narrative effluent limitations requiring implementation of BMPs to be the most appropriate form of effluent limitations for MS4s. CWA section 402(p)(3)(b)(iii) expresses a preference for narrative rather than numeric effluent limits, for example, by reference to ``management practices, control techniques and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants." 33 U.S.C. 1342(p)(3)(B)(iii). EPA determines that pollutants from wet weather discharges are most appropriately controlled through management measures rather than end-of-pipe numeric effluent limitations. As explained in the Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits, issued on August 1, 1996 [61 FR 43761 (November 26, 1996), EPA believes that the currently available methodology for derivation of numeric water quality-based effluent limitations is significantly complicated when applied to wet weather discharges from MS4s (compared to continuous or periodic batch discharges from most other types of discharge). Wet weather discharges from MS4s introduce a high degree of variability in the inputs to the models currently available for derivation of water quality based effluent limitations, including assumptions about instream and discharge flow rates, as well as effluent characterization. In addition, EPA anticipates that determining compliance with any such numeric limitations may be confounded by practical limitations in sample collection.

In the first two to three rounds of permit issuance, EPA envisions that a BMP-based storm water management program that implements the six minimum measures will be the extent of the NPDES permit requirements for the large majority of regulated small MS4s. Because the six measures represent a significant level of control if properly implemented, EPA anticipates that a permit for a regulated small MS4 operator implementing BMPs to satisfy the six minimum control measures will be sufficiently stringent to protect water quality, including water quality standards, so that additional, more stringent and/or more prescriptive water quality based effluent limitations will be unnecessary.

If a small MS4 operator implements the six minimum control measures in Sec. 122.34(b) and the discharges are determined to cause or contribute to non-attainment of an applicable water quality standard, the operator needs to expand or better tailor its BMPs within the scope of the six minimum control measures. EPA envisions that this process will occur during the first two to three permit terms. After that period, EPA will revisit today's regulations for the municipal separate storm sewer program.

If the permitting authority (rather than the regulated small MS4 operator) needs to impose additional or more specific measures to protect water quality, then that action will most likely be the result of an assessment based on a TMDL or equivalent analysis that determines sources and allocations of pollutant(s) of concern. EPA believes that the small MS4's additional requirements, if any, should be guided by its equitable share based on a variety of considerations, such as cost effectiveness, proportionate contribution of pollutants, and ability to reasonably achieve wasteload reductions. Narrative effluent limitations in the form of BMPs may still be the best means of achieving those reductions.

See Section II.L, Water Quality Issues, for further discussion of this approach to permitting, consistent with EPA's interim permitting guidance. Pursuant to CWA section 510, States implementing their own NPDES programs may develop more stringent or more prescriptive requirements than those in today's rule.

EPA's interpretation of CWA section 402(p)(3)(B)(iii) was recently reviewed by the Ninth Circuit in Defenders of Wildlife, et al v. Browner, No. 98-71080 (September 15, 1999). The Court upheld the Agency's action in issuing five MS4 permits that included water quality-based effluent limitations. The Court did, however, disagree with EPA's interpretation of the relationship between CWA sections 301 and 402(p). The Court reasoned that MS4s are not compelled by section 301(b)(1)(C) to meet all State water quality standards, but rather that the Administrator or the State may rely on section 402(p)(3)(B)(iii) to require such controls. Accordingly, the Defenders of Wildlife decision is consistent with the Agency's 1996 ``Interim Permitting Policy for Water Quality-Based Effluent Limitations in Storm Water Permits."

As noted, the 1996 Policy describes how permits would implement an iterative process using BMPs, assessment, and refocused BMPs, leading toward attainment of water quality standards. The ultimate goal of the iteration would be for water bodies to support their designated uses. EPA believes this iterative approach is consistent with and implements section 301(b)(1)(C), notwithstanding the Ninth Circuit's interpretation. As an alternative to basing these water quality-based requirements on section 301(b)(1)(C), however, EPA also believes the iterative approach toward attainment of water quality standards represents a reasonable interpretation of CWA section 402(p)(3)(B)(iii). For this reason, today's rule specifies that the ``compliance target" for the design and implementation of municipal storm water control programs is ``to reduce pollutants to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate water quality requirements of the CWA." The first component, reductions to the MEP, would be realized through implementation of the six minimum measures. The second component, to protect water quality, reflects the overall design objective for municipal programs based on CWA section 402(p)(6). The third component, to implement other applicable water quality requirements of the CWA, recognizes the Agency's specific determination under CWA section 402(p)(3)(B)(iii) of the need to achieve reasonable further progress toward attainment of water quality standards according to the iterative BMP process, as well as the determination that State or EPA officials who establish TMDLs could allocate waste loads to MS4s, as they would to other point sources.

EPA does not presume that water quality will be protected if a small MS4 elects not to implement all of the six minimum measures and instead applies for alternative permit limits under Sec. 122.26(d). Operators of such small MS4s that apply for alternative permit limits under Sec. 122.26(d) must supply additional information through individual permit applications so that the permit writer can determine whether the proposed program reduces pollutants to the MEP and whether any other provisions are appropriate to protect water quality and satisfy the appropriate water quality requirements of the Clean Water Act.

[ii] 122.33 (b) You must seek authorization to discharge under a general or individual NPDES permit, as follows:

(1) If your NPDES permitting authority has issued a general permit applicable to your discharge and you are seeking coverage under the general permit, you must submit a Notice of Intent (NOI) that includes the information on your best management practices and measurable goals required by Sec. 122.34(d). You may file your own NOI, or you and other municipalities or governmental entities may jointly submit an NOI. If you want to share responsibilities for meeting the minimum measures with other municipalities or governmental entities, you must submit an NOI that describes which minimum measures you will implement and identify the entities that will implement the other minimum measures within the area served by your MS4. The general permit will explain any other steps necessary to obtain permit authorization.